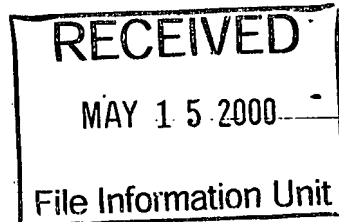


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United States Patent [19]

Springer et al.

[11] Patent Number: 5,831,036

[45] Date of Patent: Nov. 3, 1998

[54] SOLUBLE FRAGMENTS OF HUMAN INTERCELLULAR ADHESION MOLECULE-1

[75] Inventors: Timothy A. Springer, Newton, Mass.; Robert Rothlein; Steven D. Marlin, both of Danbury, Conn.; Michael L. Dustin, University City, Mo.

[73] Assignee: Dana Farber Cancer Institute, Boston, Mass.

[21] Appl. No.: 140,554

[22] Filed: Oct. 25, 1993

Related U.S. Application Data

[60] Division of Ser. No. 515,478, Apr. 27, 1990, abandoned, which is a continuation-in-part of Ser. No. 45,963, May 4, 1987, abandoned, Ser. No. 115,798, Nov. 2, 1997, abandoned, Ser. No. 155,943, Feb. 16, 1988, abandoned, Ser. No. 189,815, May 3, 1988, abandoned, Ser. No. 250,446, Sep. 28, 1988, abandoned, Ser. No. 324,481, Mar. 16, 1989, abandoned, Ser. No. 373,882, Jun. 30, 1989, abandoned, and Ser. No. 456,647, Dec. 22, 1989, abandoned.

[51] Int. Cl.⁶ C07K 14/705; A61K 38/17

[52] U.S. Cl. 530/395; 424/185.1; 435/69.3; 530/300; 530/350

[58] Field of Search 530/350, 395, 530/300, 868, 403; 424/88, 184.1, 185.1, 198.1, 199.1; 514/2, 8; 435/69.1, 69.3, 69.6

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[57] ABSTRACT

The present invention relates to intercellular adhesion molecules (ICAM-1) which are involved in the process through which lymphocytes recognize and migrate to sites of inflammation as well as attach to cellular substrates during inflammation. The invention is directed toward such molecules; screening assays for identifying such molecules and antibodies capable of binding such molecules. The invention also includes uses for adhesion molecules and for the antibodies that are capable of binding them.

4 Claims, 25 Drawing Sheets